

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Datta

Serial No. 10/067,432

Filed: February 4, 2002

For: Proxy-Based Acceleration of Dynamically
Generated Content

Art Unit: 2176

Confirmation No.: 7871

RECEIVED

JAN 27 2004

Technology Center 2100

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The citation of information on the attached Form PTO-1449, "List of Information Disclosed by Applicant" is made pursuant to 37 C.F.R. §§ 1.56, 1.97, and 1.98. A copy of each cited item is enclosed.

The Citation of this information does not constitute an admission of priority or that any cited item is available as a reference, or a waiver of any right the applicant may have under applicable statutes, Rules of Practice in patent cases, or otherwise.

Respectfully submitted,

William R. Silverio
Reg. No. 45,383

SUTHERLAND ASBILL & BRENNAN LLP
999 Peachtree Street, NE
Atlanta, Georgia 30309
Telephone: 404-853-8000
Facsimile: 404-853-8806
Atty. Docket No. 20700-0003

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on January 20, 2004.

Rebecca L. Smith

FORM PTO-1449, Adapted

LIST OF INFORMATION DISCLOSED BY APPLICANT

ATTY. DOCKET NO.: 20700-0003

SERIAL NO.: 10/067,432

FILING DATE: February 4, 2002

APPLICANT(S): Datta

GROUP:

U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE If Appropriate
	6,219,676	04/17/01	Reiner			
	6,216,212	04/10/01	Challenger et al.			
	6,195,622	02/27/01	Altschuler et al.			
	6,191,782	02/20/01	Mori et al.			
	6,182,133	01/30/01	Horvitz			
	6,167,438	12/26/00	Yates et al.			
	6,085,226	07/04/00	Horvitz			
	6,067,565	05/23/00	Horvitz			
	6,055,572	04/25/00	Saksena			
	6,023,726	02/08/00	Saksena			
	5,933,832	08/03/99	Suzuoka et al.			
	6,026,413	02/15/00	Challenger et al.			
	6,178,461	01/23/01	Chan et al.			
	6,182,122	01/30/01	Berstis			
	6,085,193	05/04/00	Malkin et al.			

FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS						
	DOCUMENT NUMBER	DATE	COUNTRY	NAME	TRANSLATION	
					Yes	No

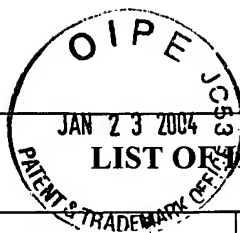
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MLPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449, Adapted



LIST OF INFORMATION DISCLOSED BY APPLICANT

ATTY. DOCKET NO.: 20700-0003

SERIAL NO.: 10/067,432

FILING DATE: February 4, 2002

APPLICANT(S): Datta

GROUP :

U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE If Appropriate

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	NAME	TRANSLATION Yes No

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	Ming-Chan Wu, Alejandro P. Buchmann; <i>Encoded Bitmap Indexing for Data Warehouses</i> , In Proc. 14 th ICDE, pages 220-230, Orlando, Florida, February 1998.
	H. Gupta, V. Harinarayan, A. Rajarman, and J.D. Ullman. Index selection for OLAP. In Proc. Thirteenth Intl. Conf. On Data Engineering, pages 208-219, Birmingham, UK. April 7-11 1997. IEEE
	C.Y. Chan and Y. Ioannidis. Bitmap index design and evaluation. In Proc. ACM SIGMOD Intl. Conf. on Management of Data, pages 355-366, Seattle, WA, June 1-4, 1998.
	J.M. Hellerstein, P.J. Haas, and H.J. Wang. Online aggregation. In Proc. ACM SIGMOD Intl. Conf. on Management of Data, pages 171-182, Tucson, AZ, May 13-15 1997.
	C.T. Ho, R. Agrawal, N. Meggido, and R. Srikant. Range queries in OLAP data cubes. In Proc. ACM SIGMOD Intl. Conf. on Management of Data, pages 73-88, Tucson, AZ, May 13-15 1997.
	I.S. Mumick, D. Quass, and B.S. Mumick. Maintenance of data cubes and summary tables in a warehouse. In Proc. ACM SIGMOD Intl. Conf. on Management of Data, pages 100-111, Tucson AZ May 13-15 1997.
	P. O'Neil and D. Quass. Improved query performance with variant indexes. In Proc. ACM SIGMOD Intl. Conf. on Management of Data, pages 38-49, Tucson, AZ, May 13-15 1997.
	D. Quass and J. Widom. On-line warehouse view maintenance. In Proc. ACM SIGMOD Intl. Conf. on Management of Data, pages 393-404, Tucson, AZ, May 13-15 1997.
	M.J. Carey and D. Kossman. On saying "enough already" in SQL. In Proc. ACM SIGMOD Intl. Conf. on Management of Data, pages 219-230, Tucson, AZ, May 13-15 1997.
	B. Adelberg, H. Garcia-Molina, and J. Widom. The STRIP Rule System for Efficiently Maintaining Derived Data. In Proc. ACM SIGMOD Intl. Conf. on Management of Data, pages 147-158, Tucson, AZ, May 13-15 1997.

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MLPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449, Adapted

LIST OF INFORMATION DISCLOSED BY APPLICANT

ATTY. DOCKET NO.: 20700-0003

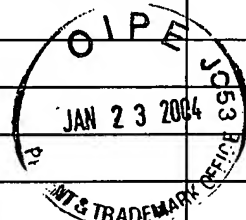
SERIAL NO.: 10/067,432

FILING DATE: February 4, 2002

APPLICANT(S): Datta

GROUP:

U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE If Appropriate
						

RECEIVED**JAN 27 2004****Technology Center 2100****FOREIGN PATENT DOCUMENTS**

DOCUMENT NUMBER	DATE	COUNTRY	NAME	TRANSLATION Yes No

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	Suchir G. Rao; Antonio Badia; Dirk Van Gucht; <i>Providing Better Support for a Class of Decision Support Queries</i> , 1996 SIGMOD-ACM; pages 217-227 (Montreal, Canada)
	Bennet Vance; David Maier; <i>Rapid Bushy Join-Order Optimization with Cartesian Products</i> , 1996 SIGMOD-ACM; pages 35-46 (Montreal, Canada).
	Latha S. Colby, Timothy Griffin, Leonid Libkin, Inderpal Singh Mumick, Howard Trickey; <i>Algorithms for Deferred View Maintenance</i> , 1996 SIGMOD-ACM; pages 469-480 (Montreal, Canada)
	Piyush Goel, Bala Iyer, <i>SQL Query Optimization: Reordering for a General Class of Queries</i> , 1996 SIGMOD-ACM; pages 47-56 (Montreal, Canada)
	Venky Harinarayan, Anand Rajaraman, Jeffrey D. Ullman, <i>Implementing Data Cubes Efficiently</i> , 1996 SIGMOD-ACM; pages 205-216 (Montreal, Canada)
	Joseph M. Hellerstein, Jeffrey F. Naughton, <i>Query Execution Techniques for Caching Expensive Methods</i> , 1996 SIGMOD-ACM; pages 423-434 (Montreal, Canada)
	John T. Robinson, <i>The K-D-B Tree; A Search Structure for Large Multidimensional Dynamic Indexes</i> , 1981 ACM; pages 10-18 (PA)
	George P. Copeland, Setrag N. Khoshafian, <i>A Decomposition Storage Model</i> , 1985 ACM pages 268-279 (Austin, Texas)
	Ashish Gupta, Inderpal Singh Mumick, V.S. Subrahmanian; <i>Maintaining Views Incrementally</i> . 1993 SIGMOD-ACM, pages 157-166 (Washington, DC)
	Michael Freeston, <i>A General Solution of the n-dimensional B-tree Problem</i> , 1995 SIGMOD-ACM, pages 80-91 (San Jose, California)

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MLPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449, Adapted

LIST OF INFORMATION DISCLOSED BY APPLICANT

ATTY. DOCKET NO.: 20700-0003


SERIAL NO.: 10/067,432

FILING DATE: February 4, 2002

APPLICANT(S): Datta

GROUP :

U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE If Appropriate
						

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	NAME	TRANSLATION Yes No

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	Timothy Griffin, Leonid Libkin, <i>Incremental Maintenance of Views with Duplicates</i> , 1995 SIGMOD-ACM, pages 328-339 (San Jose, California)
	Yue Zhuge, Hector Garcia Molina, Joachim Hammer, Jennifer Widom, <i>View Maintenance in a Warehousing Environment</i> , 1995 SIGMOD-ACM, 316-327 (San Jose, California)
	Ching-Tien Ho, Jehoshua Bruck, Rakesh Agrawal, <i>Partial-Sum Queries in OLAP Data Cubes Using Covering Codes</i> , 1997 PODS, pages 228-238 (Tucson, Arizona)
	Kjell Bratbergsengen <i>Hashing Methods and Relational Algebra Operations</i> , 1984 Singapore, Proceedings of the 10 th International Conference on Very Large Data Bases, pages 323-333.
	Patrick Valduriez, Setrag Khoshailan, George Copeland, <i>Implementation Techniques of Complex Objects</i> , 1986 Proceedings of the 12 th , Kyoto International Conference on Very Large Data Bases, Austin, Texas, pages 101-110
	Masaru Kitsuregawa, Masaya Nakayama, Mikio Takagi, <i>The Effect of Bucket Size Tuning in the Dynamic Hybrid Grace Hash Join Method</i> , 1989 Proceedings of the 15 th , Amsterdam International Conference on Very Large Data Bases, pages 257-266
	Surajit Chaudhuri, Kyuseok Shim, <i>Including Group-By in Query Optimization</i> , 1994 Proceedings of the 20 th VLDB Conference Santiago, Chile, pages 354-366
	Ashish Gupta, Venky Harinarayan, Dallan Quass, <i>Aggregate-Query Processing in Data Warehousing Environments</i> , 1995 Proceedings of the 21 st VLDB Conference (Zurich, Switzerland), pages 358-369
	Weipeng, P. Yan, Per-Ake Larson, <i>Eager Aggregation and Lazy Aggregation</i> , 1995 Proceedings of the 21 st VLDB Conference, Zurich, Switzerland, pages 345-357
	Sameet Agarwal, Rakesh Agrawal, Prasad M. Deshpande, Ashish Gupta, Jeffrey F. Naughton, Raghu Ramakrishnan, Sunita Sarawagi, <i>On the Computation of Multidimensional Aggregates</i> , 1996 Proceedings of the 22 nd VLDB Conference Mumbai (Bombay), India, pages 506-521

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MLPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449, Adapted

LIST OF INFORMATION DISCLOSED BY APPLICANT

ATTY. DOCKET NO.: 20700-0003

SERIAL NO.: 10/067,432

FILING DATE: February 4, 2002

APPLICANT(S): Datta

GROUP :

U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE If Appropriate

RECEIVED

JAN 27 2004

Technology Center 2100

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	NAME	TRANSLATION Yes No

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	Damianos Chatziantoniou, Kenneth A. Ross, <i>Querying Multiple Features of Groups in Relational Databases</i> , 1996 Proceedings of the 22 nd VLDB Conference, Mumbai (Bombay), India, pages 295-306
	Curtis Dyreson, <i>Information Retrieval from an Incomplete Data Cube</i> , 1996 Proceedings of the 22 nd VLDB Conference, Mumbai (Bombay), India, pages 532-543
	Amit Shukla, Prasad M. Deshpande, Jeffrey F. Naughton, Karthikeyan Ramasamy, <i>Storage Estimation for Multidimensional Aggregates in the Presence of Hierarchies</i> , 1996 Proceedings of the 22 nd VLDB Conference Mumbai (Bombay), India, pages 522-531
	S. Sarawagi, Indexing OLAP data. <i>Bulletin of the IEEE Computer Society Technical Committee on Data Engineering</i> , pages 1-9, 1996
	C.D. French, Teaching an OLTP database kernel advanced datawarehousing techniques. In Proc. 13 th ICDE, pages 194-198, Birmingham, UK, April 7-11 1997
	S. Khoshafian, G.P. Copeland, T. Jagodis, H. Boral, and P. Valduriez. A query processing strategy for the decomposed storage model. In Proc. ICDE, pages 636-643, 1987.
	P. O'Neil. Model 204 architecture and performance. In 2 nd Intl. Workshop on High Performance Transaction Systems (HPTS), volume 359 of Springer-Verlag Lecture Notes on Computer Science, pages 40-59. Springer-Verlag Asilomar, CA 1987.
	P. O'Neil and G. Graefe. Multi-table joins through bitmapped join indices. SIGMOD Record, 24(3):8-11, September 1995.
	J.H. Chu and G. Knott. An analysis of B-trees and their variants. Information Systems, 14(5), 1989.
	B. Salzberg. Access Methods. ACM Computing Surveys, 28(1): 117-120, March 1996.

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MLPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449, Adapted

LIST OF INFORMATION DISCLOSED BY APPLICANT

ATTY. DOCKET NO.: 20700-0003

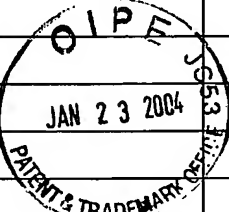
SERIAL NO.: 10/067,432

FILING DATE: February 4, 2002

APPLICANT(S): Datta

GROUP :

U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE If Appropriate
						

RECEIVED

JAN 27 2004

Technology Center 2100

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	NAME	TRANSLATION Yes No	

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	S. Chauduri and U. Dayal. An overview of data warehousing and OLAP technology. SIGMOD Record, 26(1):65-74, March 1997.
	R. Armstrong. Data warehousing: Dealing with the grown pains. In Proc. Thirteenth Intl. Conf. on Data Engineering, pages 199-205, Birmingham, UK, April 7-11 1997. IEEE.
	D. Comer. The ubiquitous B-tree. ACM Computing Surveys, 11(2):121-138, June 1979.
	M. Spiliopoulou, M. Hatzopoulos, and Y. Cotronis. Parallel optimization of large join queries with set operators and aggregates in a parallel environment supporting pipeline. IEEE TKDE, 8(3):429-45, June 1996.
	S.V. Vrbisky and J.W.S. Liu. APPROXIMATE – a query processor that produces monotonically improving approximate answers. IEEE Transactions on Knowledge and Data Engineering, 5(6):1056-1068, 1993.
	A. Guttman, R-trees: a dynamic index structure for spatial searching. In M. Stonebraker, editor, Readings in Database Systems, pages 599-609. Morgan Kaufmann Publishers, Inc., San Mateo, CA 1988.
	E.F. Codd, S.B. Codd and C.T. Salley. Providing OLAP (on-line analytical processing) to user-analysts: An IT mandate. Technical report, E.F. Codd & Associates, 1993.
	Y. Zhao, P.M. Deshpande, and J.F. Naughton. An array-based algorithm for simultaneous multidimensional aggregates. In Proc. ACM SIGMOD Intl. Conf. on Management of Data, pages 159-170, Tucson, AZ, May 13-15 1997.
	A. Shoshani. OLAP and statistical databases: Similarities and differences. ACM TODS, 22, 1997.
	N. Roussopoulos, Y. Kotidis, and M. Roussopoulos. Cubetree: Organization of and bulk updates on the data cube. In Proc. ACM SIGMOD Intl. Conf. on Management of Data, pages 89-99, Tucson, AZ, May 13-15, 1997.

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MLPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449, Adapted

LIST OF INFORMATION DISCLOSED BY APPLICANT

ATTY. DOCKET NO.: 20700-0003

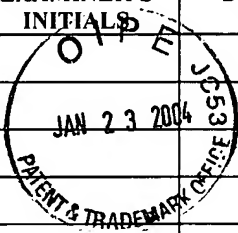
SERIAL NO.: 10/067,432

FILING DATE: February 4, 2002

APPLICANT(S): Datta

GROUP :

U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE If Appropriate
						

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	NAME	TRANSLATION Yes No	

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	Oracle Corp. Star queries in Oracle8. White Paper, June 1997.
	D. Quass, Maintenance Expressions for Views with Aggregations. In Proc. Workshop on Materialized Views: Techniques and Applications, Montreal, Canada, June 7, 1996.
	J. Nievergelt, H. Hinterberger and K.C. Sevcik. The grid file: An adaptable, symmetric multikey file structure. In M. Stonebraker, editor, Readings in Database Systems, pages 582-598. Morgan-Kaufmann Publishers, Inc., San Mateo, CA 1988.
	A. Gupta, H. Jagadish, and I. Mumick. Data integration using self-maintainable views. In Proc. Fifth Intl. Conf. on Extending Database Technology, Avignon, France, March 1996
	S. Chaudhuri and K. Shim. Including group-by in query optimization. In Proc. 20 th Intl. Conf. on Very Large Databases, pages 131-139, Santiago, Chile, September 1994
	Y. Kotidis and N. Roussopoulos. An alternative storage organization for rolap aggregate views based on cubetrees. In Proc. ACM SIGMOD Intl. Conf. on Management of Data, pages 249-258, Seattle, WA, June 1-4 1998.
	Red Brick Systems, Inc., Star Schema Processing for Complex Queries, White Paper, pages 1-21

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MLPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.